

SERIAL NO. 10/627,847

IN THE CLAIMS

Claim 1. (Currently Amended) A thermoplastic polyolefin (TPO) roofing membrane comprising a reinforcement scrim sandwiched between cap and base layers which are pressed into a single ply membrane having a thickness of about 35-90 mils, characterized in that both of said layers are made of, by weight, 50-90% of metallocene-catalyzed ~~polyolefin~~, **polyethylene** and about 10-50% of **one or more** additives **selected from the group consisting of a crystallinity enhancing polymer, an ethylene-propylene rubber, a fire retardant, zinc oxide, an antioxidant, a UV stabilizer, carbon black, calcium carbonate, titanium dioxide, a thermal stabilizer, and a filler**, said membrane exhibiting a 90° heat seam peel strength of ≥ 60 lbs/linear inch (ASTM D-413) and a cold brittleness point of $\leq -50^{\circ}\text{C}$ (ASTM D-413).

Claim 2. (Original) A roofing membrane according to claim 1 wherein said 90° heat seam peel strength is about 66-69 lbs/linear inch over a 4 day period, and said cold brittleness point is about -58 to -70°C .

Claim 3. (Original) A roofing membrane according to claim 1 wherein said polyolefin is a copolymer of ethylene and butene.

Claim 4. (Original) A roofing membrane according to claim 1 in which said layers include a crystallinity enhancing polymer.

Claim 5. (Original) A roofing membrane according to claim 1 wherein the molecular weight distribution (MWD) of said polyolefin is about 2 to 2.5.